

Ecotox Report for Case # P-18-0078

General

CBI: [REDACTED]	Report Status: Complete
Status 11/21/2018	CRSS Date: 01/04/2018
Date:	
SAT Date: 01/05/2018	SAT Tracy
	Chair: Behrsing
Consolidated N	Consolidated Set:
PMN:	
Ecotox	
Related Cases:	
Health Related	
Cases:	
Submitter: [REDACTED]	
CAS Number: [REDACTED]	
Chemical	
Name: [REDACTED]	
Use: [REDACTED]	
Synthetic scheme: [REDACTED]	Polymer Exemption case (E1). All
analogues are [REDACTED]	[REDACTED]
Trade Name: ZQ656628	
PV-max(kg/yr): [REDACTED]	Ecotox Kennedy, Assessor: Amuel

Fate Summary Statement

Fate P-18-0078
Summary
Statement: FATE: [REDACTED]
Solid
S =
Negl.
VP < 1.0E-6 torr at 25 °C (E)
BP > 400 °C (E)
H
< 1.00E-8 (E)
POTW removal (%) = 90 via sorption
Time for
complete ultimate aerobic biodeg > mo
Sorption to soils/sediments =

v.strong
PBT Potential: P3B1
*CEB FATE: Migration to ground water
= negl

Physical Chemical Information

Molecular Weight:	██████	
Wt% < 500:	████	Wt% < 1000: █████
Physical State - Neat:	Solid (est)	
Melting Point:		Melting Point (est):
MP (EPI):		
Vapor Pressure:		Vapor Pressure (est): <0.000001
VP (EPI):		
Water Solubility:		Water Solubility (est): <0.000001
Water Solubility (EPI):		
Henry's Law::		
Log Koc:		Log Koc (EPI):
Log Kow:		Log Kow (EPI):
Log Kow Comment:		

SAT Concern Level

Ecotox Rating (1):	1
Ecotox Rating Comment (1):	
Ecotox Rating (2):	
Ecotox Rating Comment (2):	
Ecotox Route of Exposure:	No releases to water

Ecotox Comments

Exposure N Based Review (Eco): Ecotox Comments: Exposure Based Testing:
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PBT Ratings

Persistence	Bioaccumulation	Toxicity	Comments
3	1	2	

Eco-Toxicity Comment:

Fate Ratings

Removal ⁹⁰ in WWT/POTW (Overall): Condition	Rating Values	1	2	Rating Description 3	4	Comment
Fish BCF:						
Log Fish BCF:						
WWT/POTW Sorption:	3	Low	Moderate	Strong	V. Strong	
WWT/POTW Stripping:	4	Extensive	Moderate	Low	Negligible	
Biodegradation Removal:	4	Unknown	High	Moderate	Negligible	
Biodegradation Destruction:		Unknown	Complete	Partial	—	
Aerobic Biodeg Ult:	4	<= Days	Weeks	Months	> Months	
Aerobic Biodeg Prim:		<= Days	Weeks	Months	> Months	
Anaerobic Biodeg Ult:	4	<= Days	Weeks	Months	> Months	
Anaerobic Biodeg Prim:		<= Days	Weeks	Months	> Months	
Hydrolysis (t1/2 at pH 7,25C) A:		<= Minutes	Hours	Days	>= Months	

Removal90 in WWT/POTW (Overall):						
Condition	Rating Values	Rating Description				Comment
		1	2	3	4	
Hydrolysis (t1/2 at pH 7,25C) B:		<= Minutes	Hours	Days	>= Months	
Sorption to Soils/Sediments:	1	V. Strong	Strong	Moderate	Low	
Migration to Ground Water:	1	Negligible	Slow	Moderate	Rapid	
Photolysis A, Direct:		Negligible	Slow	Moderate	Rapid	
Photolysis B, Indirect:		Negligible	Slow	Moderate	Rapid	
Atmospheric Ox A, OH:		Negligible	Slow	Moderate	Rapid	
Atmospheric Ox B, O3:		Negligible	Slow	Moderate	Rapid	
Bio Comments:						
Fate Comments:	PMN					
	Material:					
	Overall wastewater treatment removal is 90% via sorption.					
	Sorption to sludge is strong based on high molecular volume.					
	Air					
	Stripping (Volatilization to air) is negligible based on high molecular volume.					
	Removal by biodegradation in wastewater treatment is negligible based on high molecular volume.					
	The aerobic aquatic biodegradation half-life is greater than months based on high molecular volume.					
	The anaerobic aquatic biodegradation half-life is greater than months based on the aerobic biodegradation half-life. The anaerobic biodegradation half-life is projected to be greater than or equal to the aerobic biodegradation half-life.					
	Sorption to soil and sediment is very strong based on high molecular volume.					
	Migration to groundwater is negligible based on high molecular volume.					
	PMN Material:					
	High Persistence (P3) is based					

Removal ⁹⁰ in WWT/POTW (Overall):					Comment
Condition	Rating Values	1	2	Rating Description 3	
				4	
					on the estimated anaerobic biodegradation half-life. Low Bioaccumulation potential (B1) is based on high molecular volume. Bioconcentration/Bioaccumulation factor to be put into E-Fast: N/A.

Ecotoxicity Values

Test organism	Test Type	Test Endpoint	Predicted	Experimental	Comments
Fish	96-h	LC50	*		* = no effects at saturation; Predictions are based on the negligible water solubility of P-18-0078 (insoluble nonionic polymer; MW [REDACTED])
Daphnid	48-h	LC50	*		* = no effects at saturation; Predictions are based on the negligible water solubility of P-18-0078 (insoluble nonionic polymer; MW [REDACTED] with [REDACTED])
Green Algae	96-h	EC50	*		* = no effects at saturation; Predictions are based on the

Test organism	Test Type	Test Endpoint	Predicted	Experimental	Comments
					negligible water solubility of P-18-0078 (insoluble nonionic polymer; MW [REDACTED])
Fish	-	Chronic Value	*		* = no effects at saturation; Predictions are based on the negligible water solubility of P-18-0078 (insoluble nonionic polymer; MW [REDACTED])
Daphnid	-	Chronic Value	*		* = no effects at saturation; Predictions are based on the negligible water solubility of P-18-0078 (insoluble nonionic polymer; MW [REDACTED])
Green Algae	-	Chronic Value	*		* = no effects at saturation; Predictions are based on the negligible water solubility of P-18-0078 (insoluble nonionic

Test organism	Test Type	Test Endpoint	Predicted	Experimental	Comments
<p>Ecotox Value Predictions are based on the negligible water solubility of P-18-0078 (insoluble nonionic polymer; XXXXXXXXXX; solid with an unknown MP (P); S = negligible (P); effective concentrations based on 100% active ingredients and mean measured concentrations; hardness <150 mg/L as CaCO₃; and TOC <2.0 mg/L.</p>					

Ecotox Factors

Factors	Most Sensitive Endpoint	Assessment Factor	CoC	Comment
Acute Aquatic (ppb):				Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.
Chronic Aquatic (ppb):				Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.
Factors	Values	Comments		
SARs: Nonionic Polymers-insoluble				
SAR Class: Nonionic Polymers-Insoluble				
TSCA NCC Category?				

<p>Recommended Testing:</p> <p>Ecotox Factors Environmental</p> <p>Comments: Hazard: Environmental hazard is relevant to whether a new chemical substance is likely to present unreasonable risk because the significance of the risk is dependent upon both the hazard (or toxicity) of the chemical substance and the extent of exposure to the substance. EPA</p>

estimated environmental hazard of this new chemical substance using predictions based on the negligible water solubility of P-18-0078 (insoluble nonionic polymer; MW [REDACTED]) [REDACTED] Acute and chronic toxicity values estimated for fish, aquatic invertebrates, and algae are all no effects at saturation. These toxicity values indicate that the new chemical substance is expected to have low environmental hazard. Because hazards are not expected up to the water solubility limit, acute and chronic concentrations of concern are not identified.

Environmental Risk: Risks to the environment from acute and chronic exposure are not expected at any concentration of the new chemical substance soluble in the water (i.e., no effects at saturation).

Comments/Telephone

Log

Artifact	Update/Upload Time
[REDACTED]	[REDACTED]